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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KARIKARI, KWASI

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/521,392	Applicant(s) AFLALO ET AL.	
	Examiner Kwasi Karikari	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group 1 covering claims 1-18 in the reply filed on 11/02/2005 is acknowledged.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

a) Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed language "the protocol includes..." in claim 1 is directed to non-statutory subject matter. The claimed limitation "Protocol" is directed to neither a "process" or a "machine".

b) Claims 1-14 are further rejected under 35 U.S.C. 101 based on the theory that claim 1 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 10, which is drafted so as to set forth the statutory class of invention in the alternative only. *Id* at 1551.

Applicant has not complied with 35 U.S.C 101. Corrections are required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is both an apparatus and the method steps of using the apparatus, which renders the claimed invention indefinite under 35 U.S.C. 112, second paragraph.

(See Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990)). Corrections are required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under U.S.C. 103(a) as being unpatentable over Oprescu-Surcobe et al., (U.S. 5,842,130), (hereinafter Surcobe), in view of Teicher et. al., (U.S. 20020070849 A1), (hereinafter Teicher), and further in view of Heinonen et. al., (U.S. 20050281237 A1), (hereinafter Heinonen).

Regarding **claim 1**, Surcobe discloses a directional dialing cellular telephone protocol, for use within a cellular telephone subscriber community substantially sharing data via at least one mutual common service provider, and the protocol includes (a wireless communication system 200 including base stations and mobile stations 319 and 217, see Fig. 1):

l) in the subscriber community (200), a first user (319) operating a modified cellular telephone unit (mobile phone 319 includes both direction and omni-directional antennae) and the unit having a directional antenna (321) interfaced thereto and a first

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protocol software application interfaced (activation device 323, see col. 4, lines 41-53

Fig. 2) thereto;

II) in the subscriber community (200), a second user (217) operating a modified cellular telephone unit and the unit having an omni-directional antenna (an inherent feature of mobile station 217), and the omni-directional antenna of the second user unit (217) is configured to receive signals (inherent feature of the communication system 200) from the directional antenna (321) of the first user unit (319); and III) the protocol has steps of

a) pointing the directional antenna of the first unit at the second unit (see col. 5, lines 9-15),

b) activating the first protocol software application and thereby sending a first signal from the directional antenna to the omni-directional antenna (mobile station 319 transmits narrow beam signal towards target mobile 217, see col. 5, lines 34-46), but fails to teach a second protocol software application interfaced thereto and receiving the first signal at the omni-directional antenna and thereby activating the second protocol software application, and sending an acknowledgement to the first unit via a mutual common service provider.

Teicher teaches that upon receiving a message, in the Bluetooth environment, the internal signal device 104 deeps to indicate receipt of a message (see Par. [0021]); which corresponds to "receiving the first signal at the omni-directional and thereby activating the second protocol software application.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Teicher into the system of Surcobe for the benefit of achieving a system that employs signaling application in a Bluetooth environment.

However, the combination of Surcobe and Teicher fails to teach sending an acknowledgement to the first unit via a mutual common service provider.

Heinonen teaches that any Bluetooth device (101,119,123 and 125) that is listening for an acquiring message containing the same inquiring access code (IAC), will recognize the message and respond (see Pars. [0037-38 and 0042]) and synchronization of information over WAP (see Figs. 1 and 8).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a system that offer special services in a Bluetooth environment.

Regarding **claim 2**, as the combination of Surcobe, Teicher and Heinonen is made of, Surcobe further discloses the directional dialing cellular telephone protocol according to claim 1 wherein activating the first protocol includes iterative activation events whereby a first activation event has a predetermined lowest power transmission (custom mobile 319 initiates search sequence, to identify the unique identity of target mobile 217, by enabling activation device 323 and transmits narrowbeam 328 towards target mobile 217, see col. 5, lines 11-17), and each subsequent activation has a predetermined higher power transmission than its respective predecessor activation event (narrowbeam signal 328 has the strongest signal strength at angle P-S-Q and the signal

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gradually fades towards zero at angles M-S-P and Q-S-N, see col. 5, lines 44-57 and Fig. 4 that depicts an ideal spatial distribution of signal strength, energy at a given distance from S, see col. 6, lines 26-45) and the iterative activation events are terminated upon receipt of the acknowledgement (the unique identity of target mobile station 217 is selected and send to custom mobile station 319 via base station 291, see col. 8, lines 54-65).

Regarding **claim 3**, Surcobe further discloses the directional dialing cellular telephone protocol according to claim 1 wherein the subscriber community includes a plurality of paying members (mobile stations communicate with base station in the wireless communication system 200, see col. 3, lines 11-30 and Fig. 1).

Regarding **claim 4**, Surcobe further discloses the directional dialing cellular telephone protocol according to claim 1 wherein the members (mobile stations) are registered at a data warehousing facility (MSC or associated Local Registers) that is accessible via a service provider of the at least one mutual common service provider (mobile registration is implemented at MSC via BTS 294, see col. 3, lines 53-65).

Regarding **claim 5**, Surcobe and Heinonen, according to claim 1, fails to teach that the modified cellular telephone unit of the second user is characterized by colorful markings that are visible at a distance.

Teicher teaches a signaling system 100 that provides signals to group and non-group members and communicate messages between group members (see Pars. [0007 and 0016] and Figs. 1 and 4). Teicher further teaches that system 100 includes external signaling device 102 that generates signals including flashing light, rotating lamp and lamps that can change in color (see Par. [0017]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Teicher into the system of Surcobe and Heinonen for the benefit of achieving a system in which messages are transmitted at low power levels so as to conserve power.

Regarding **claim 6**, Surcobe and Heinonen, according to claim 1, fails to teach the modified cellular telephone unit of the second user is characterized by at least one illumination component that is visible at a distance.

Teicher teaches a signaling system 100 that provides signals to group and non-group members and communicate messages between group members (see Pars. [0007 and 0016] and Figs. 1 and 4). Teicher further teaches that system 100 includes external signaling device 102 that generates signals including flashing light, rotating lamp and lamps that can change in color (see Par. [0017]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Teicher into the system of Surcobe and Heinonen for the benefit of achieving a system in which messages are transmitted at low power levels so as to conserve power.

Regarding **claim 7**, Surcobe and Heinonen, according to claim 6, fails to teach that at least one of the illumination components is modulated.

Teicher teaches a signaling system 100 that provides signals to group and non-group members and communicate messages between group members (see Pars. [0007 and 0016] and Figs. 1 and 4). Teicher further teaches that system 100 includes external signaling device 102 that generates signals including flashing light, rotating lamp and lamps that can change in color (see Par. [0017]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Teicher into the system of Surcobe and Heinonen for the benefit of achieving a system in which messages are transmitted at low power levels so as to conserve power.

Regarding **claim 8**, Surcobe and Teicher, according to claim 1, fails to teach that the acknowledgement is via a predetermined media format selected from the list: SMS, GPRS, Data Call, WAP.

Heinonen teach any use Bluetooth inquires for personal profile can be sent to user server 851, via a WAP gateway (see Par. [0067] and Fig. 8) and antenna 115 sends and receives signal 117 with an access point 125 (see Pars. [0037-38]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a system that include WAP gateway to facilitates transmission and reception of information.

Regarding **claim 9**, Surcobe and Teicher, according to claim 1, fails to teach that the acknowledgement includes a unilateral datum associated with the second user and the datum is selected from the list: a mutual common service provider recognizable "telephone number" associated with the modified cellular telephone unit of the second user; a time stamp and a media ID; a security code; a status report; and a supply request.

Heinonen teaches that an inquiring device 119 and user's terminal 101 exchange messages carried in Service Delivery Protocol packet, see Par. [0044] and Fig. 1), which corresponds to a "unilateral datum". Heinonen further teaches that the attribute ID list identifies the attributes that the inquiring device 119 is requesting (see Par. [0044]), which reads on "supply request".

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a system that include SDP database for storing user's profile and provisioning of requested attributes to users and inquiring device.

Regarding **claim 10**, Surcobe and Teicher, according to claim 1, fails to teach that the acknowledgement spans at least one bilateral information packet interchange.

Heinonen teaches that the user's terminal 101 will respond with an inquiring response packet after receiving an inquiring packet from the inquiring device 119 (see Par. [0042] and Fig. 1).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a system that facilitates the synchronization of packet between a user device and an inquiring device.

Regarding **claim 11**, Surcobe and Teicher, according to claim 10, fails to teach that the acknowledgment is restricted to a mutually agreeable class of service, and parameters defining classes of service are selected from the list: user rank, user profile component, user affiliation, current activation status, price, and arbitration convention.

Heinonen teaches that general information can be transferred in a push model, without authentication of the receiving party, and sending of more detailed private profile is protected by authentication and encryption (see Par. [0073]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a data transmission system that incorporates authentication and encryption mechanism.

Regarding **claim 12**, Surcobe and Teicher, according to claim 10, fails to teach that the interchange includes at least one datum of information relating to a personal preference of the respective users.

Heinonen teaches that the user's terminal 101 will return a profile response such as "I'm interested" to the inquiring device 119, after the user's terminal 101 has

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compared a bit mask information with a reference bit mask and an indication of any generic interests are found (see Par. [0069] and Fig. 9).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a system that facilitates matchmaking process.

Regarding **claim 13**, Surcobe and Teicher, according to claim 10, fails to teach that the respective users authorize an accessible data storage facility to release predetermined datum to the respective other user, and the datum is selected from the list: alpha-numeric content, audio content, visual content, multi-media content.

Heinonen teaches that the user's profiles could be downloaded to user's device and the user's terminal can broadcast user profile information (see Par. [0067 and 0069]). Heinonen further teaches authentication and encryption between the sending and the receiving parties (see Pars. [0070,0073-74]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a matchmaking system that employs security mechanism.

Regarding **claim 14**, Surcobe and Teicher, according to claim 10, fails to teach that the release is according to at least one respective user specified approval for the release of a next at least one datum.

Heinonen teaches that two terminals can further share more detailed information in their respective user profiles if their user profiles have first level of close matching (see Par. [0072]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Heinonen into the system of Surcobe and Teicher for the benefit of achieving a matchmaking system that employs security mechanism.

Regarding **claim 15**, Surcobe discloses a directional dialing cellular telephone protocol enabled device (system 200, Fig. 1) including a modified cellular telephone unit (custom mobile 319, Fig. 1) having a directional antenna (321) interfaced thereto and a first protocol software application (activation device 323, see col. 4, lines 41-53 Fig. 2) thereto; interfaced thereto and also having an omni-directional antenna (320) interfaced thereto; and a second protocol software application interfaced thereto (inherent feature of custom mobile 319 that will ensure the operation of the omni-directional antenna 320).

Regarding **claim 16**, Surcobe further discloses the directional dialing cellular telephone protocol enabled device according to claim 15 wherein the directional antenna is selected from the list microwave antenna (position and identity information of mobile station 217 are forward to custom mobile 319, and narrowbeam signal is sent towards mobile station 217, see col. 8, lines 60-65 and col. 5, lines 34-43), i.e., the usage of radio frequency for communication, ultrasound transducer, and infrared transducer; and

the omni-directional antenna includes a receiver compatible with the directional antenna (custom mobile 319 has both directional 321 and omni-directional 320 antennae, see Fig 2).

5. Claims 17 and 18 are rejected under U.S.C. 103(a) as being unpatentable over Oprescu-Surcobe in view of Teicher and further in view of Heinonen and further in view of Provost et al. (U.S. 20040203948 A1), (hereinafter Provost).

Regarding **claim 17**, Surcobe, Teicher and Heinonen according to claim 15, fails to teach that at least one of the protocol software applications is interfaced to at least one SIM card.

Provost teaches that the reception of SMS message at the mobile terminal 2 triggers a dedicated application in a Sim card of the mobile station (see Par. [0104])

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Provost into the system of Surcobe, Teicher and Heinonen for the benefit of achieving a system that include Sim card application.

Regarding **claim 18**, Surcobe, Teicher and Heinonen according to claim 15, fails to teach that at least one of the protocol software applications is interfaced to at least one supplemental memory media.

Provost teaches that the reception of SMS message at the mobile terminal 2 triggers a dedicated application in a Sim card of the mobile station (see Par. [0104]);

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wherein the Sim card reads on "supplementary memory media".

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Provost into the system of Surcobe, Teicher and Heinonen for the benefit of achieving a system that include Sim card application.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gray (U.S. 6,108,323) teaches a method and system for operating a CDMA cellular system having beamforming antennas.

Lassle et al. (U.S. 6,472,998) teaches a receiver of a remote control system and a method for operating a remote control system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571- 272 5905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari
Patent Examiner.

A handwritten signature in black ink, appearing to read 'Charles Appiah', written in a cursive style.

CHARLES APPIAH
PRIMARY EXAMINER